

SEQUENCE LISTING

<110> Lee, In-Hee
 Son, Seok-Min
 Jang, Woong-Sik
 Kim, Kyu-Nam

<120> Antimicrobial Peptide Isolated From Halocynthia Aurantium

<130> 2393.0010000

<150> PCT/KR2002/002195

<151> 2002-11-22

<160> 15

<170> PatentIn version 3.3

<210> 1

<211> 18

<212> PRT

<213> Halocynthia aurantium

<220>

<221> PEPTIDE

<222> (1)..(1)

<223> 18mer of halocydin

<400> 1

Trp	Leu	Asn	Ala	Leu	Leu	His	His	Gly	Leu	Asn	Cys	Ala	Lys	Gly	Val
1				5					10					15	

Leu Ala

<210> 2

<211> 15

<212> PRT

<213> Halocynthia aurantium

<220>

<221> PEPTIDE

<222> (1)..(1)

<223> 15mer of halocydin

<400> 2

Trp	Leu	Asn	Ala	Leu	Leu	His	His	Gly	Leu	Asn	Cys	Ala	Lys	Gly
1				5					10					15

<210> 3

<211> 17

<212> PRT

<213> Halocynthia aurantium

<220>
<221> PEPTIDE
<222> (1)..(17)
<223> 17mer of halocydin

<400> 3

Trp Leu Asn Ala Leu Leu His His Gly Leu Asn Cys Ala Lys Gly Val
1 5 10 15

Leu

<210> 4
<211> 16
<212> PRT
<213> Halocynthia aurantium

<220>
<221> PEPTIDE
<222> (1)..(16)
<223> 16mer of halocydin

<400> 4

Trp Leu Asn Ala Leu Leu His His Gly Leu Asn Cys Ala Lys Gly Val
1 5 10 15

<210> 5
<211> 14
<212> PRT
<213> Halocynthia aurantium

<220>
<221> PEPTIDE
<222> (1)..(14)
<223> 14mer of halocydin

<400> 5

Trp Leu Asn Ala Leu Leu His His Gly Leu Asn Cys Ala Lys
1 5 10

<210> 6
<211> 13
<212> PRT
<213> Halocynthia aurantium

<220>
<221> PEPTIDE
<222> (1)..(13)
<223> 13mer of halocydin

<400> 6

Trp Leu Asn Ala Leu Leu His His Gly Leu Asn Cys Ala
1 5 10

<210> 7

<211> 12

<212> PRT

<213> Halocynthia aurantium

<220>

<221> PEPTIDE

<222> (1)..(12)

<223> 12mer of halocydin

<400> 7

Trp Leu Asn Ala Leu Leu His His Gly Leu Asn Cys
1 5 10

<210> 8

<211> 18

<212> PRT

<213> Halocynthia aurantium

<220>

<221> PEPTIDE

<222> (1)..(18)

<223> 18mer congener of halocydin

<400> 8

Trp Leu Asn Ala Leu Leu Lys Lys Gly Leu Asn Cys Ala Lys Gly Val
1 5 10 15

Leu Ala

<210> 9

<211> 19

<212> PRT

<213> Halocynthia aurantium

<220>

<221> PEPTIDE

<222> (1)..(19)

<223> 19mer of halocydin

<400> 9

Lys Trp Leu Asn Ala Leu Leu His His Gly Leu Asn Cys Ala Lys Gly
1 5 10 15

Val Leu Ala

<210> 10
<211> 19
<212> PRT
<213> Halocynthia aurantium

<220>
<221> PEPTIDE
<222> (1)..(19)
<223> 19mer congener of halocydin

<400> 10

Lys Trp Leu Asn Ala Leu Leu Lys Lys Gly Leu Asn Cys Ala Lys Gly
1 5 10 15

Val Leu Ala

<210> 11
<211> 18
<212> PRT
<213> Halocynthia aurantium

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> X is tyrosine, valine, isoleucine, leucine, methionine,
phenylalanine or tryptophane

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X is arginine, lysine, histidine, asparagine, or glutamine

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> X is glycine, serine, alanine, or threonine

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> X is tyrosine, valine, isoleucine, leucine, methionine,
phenylalanine or tryptophane

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> X is tyrosine, valine, isoleucine, leucine, methionine,
phenylalanine or tryptophane

<220>
<221> MISC_FEATURE

```

<222> (7)..(7)
<223> X is arginine, lysine, or histidine

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> X is arginine, lysine, or histidine

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> X is glycine, serine, alanine, or threonine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X is tyrosine, valine, isoleucine, leucine, methionine,
      phenylalanine or tryptophane

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> X is arginine, lysine, histidine, asparagine, or glutamine

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> X is glycine, serine, alanine, or threonine

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> X is arginine, lysine, or histidine

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> X is glycine, serine, alanine, or threonine

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> X is tyrosine, valine, isoleucine, leucine, methionine,
      phenylalanine or tryptophane

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> X is tyrosine, valine, isoleucine, leucine, methionine,
      phenylalanine or tryptophane

<220>
<221> MISC_FEATURE
<222> (18)..(18)
<223> X is glycine, serine, alanine, or threonine

<400> 11

```

```

Trp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa
1           5                     10                     15

```

Xaa Xaa

<210> 12
<211> 18
<212> PRT
<213> Halocynthia aurantium

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> X is leucine, isoleucine, or valine

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X is arginine, lysine, histidine, asparagine, or glutamine

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> X is alanine, serine, or glycine

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> X is leucine, isoleucine, or valine

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> X is leucine, isoleucine, or valine

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> X is asparagine, glutamine, histidine, lysine, or arginine

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> X is asparagine, glutamine, histidine, lysine, or arginine

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> X is alanine, serine, or glycine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X is leucine, isoleucine, or valine

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> X is arginine, lysine, histidine, asparagine, or glutamine

```

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> X is alanine, serine, or glycine

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> X is asparagine, glutamine, histidine, lysine, or arginine

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> X is alanine, serine, or glycine

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> X is leucine, isoleucine, or valine

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> X is leucine, isoleucine, or valine

<220>
<221> MISC_FEATURE
<222> (18)..(18)
<223> X is alanine, serine, or glycine

```

<400> 12

```

Trp Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa
1           5           10           15

```

Xaa Xaa

```

<210> 13
<211> 15
<212> PRT
<213> Halocynthia aurantium

```

```

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> X is glycine, serine, alanine, or threonine

```

```

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> X is tyrosine, valine, isoleucine, leucine, methionine,
      phenylalanine, or tryptophane

```

```

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X is tyrosine, valine, isoleucine, leucine, methionine,

```

phenylalanine, or tryptophane

```

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> X is arginine, lysine, or histidine

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> X is arginine, lysine, or histidine

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> X is glycine, serine, alanine, or threonine

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> X is tyrosine, valine, isoleucine, leucine, methionine,
      phenylalanine, or tryptophane

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> X is arginine, lysine, histidine, asparagine, or glutamine

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X is glycine, serine, alanine, or threonine

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> X is arginine, lysine, or histidine

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> X is glycine, serine, alanine, or threonine

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> X is tyrosine, valine, isoleucine, leucine, methionine,
      phenylalanine, or tryptophane

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> X is tyrosine, valine, isoleucine, leucine, methionine,
      phenylalanine, or tryptophane

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> X is glycine, serine, alanine, or threonine

<400> 13

```


Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
1				5				10					15	

```

<210> 14
<211> 15
<212> PRT
<213> Halocynthia aurantium

```

```

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> X is alanine, serine, or glycine

```

```

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> X is leucine, isoleucine, or valine

```

```

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> X is leucine, isoleucine, or valine

```

```

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> X is asparagine, glutamine, histidine, lysine, or arginine

```

```

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> X is asparagine, glutamine, histidine, lysine, or arginine

```

```

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> X is alanine, serine, or glycine

```

```

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> X is leucine, isoleucine, or valine

```

```

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> X is arginine, lysine, histidine, asparagine, or glutamine

```

```

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> X is alanine, serine, or glycine

```

```

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> X is asparagine, glutamine, histidine, lysine, or arginine

```

```

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> X is alanine, serine, or glycine

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> X is leucine, isoleucine, or valine

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> X is leucine, isoleucine, or valine

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> X is alanine, serine, or glycine

```

```

<400> 14

```

```

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa
1          5          10          15

```

```

<210> 15
<211> 15
<212> PRT
<213> Halocynthia aurantium

```

```

<400> 15

```

```

Ala Leu Leu His His Gly Leu Asn Cys Ala Lys Gly Val Leu Ala
1          5          10          15

```